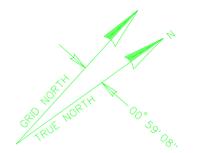
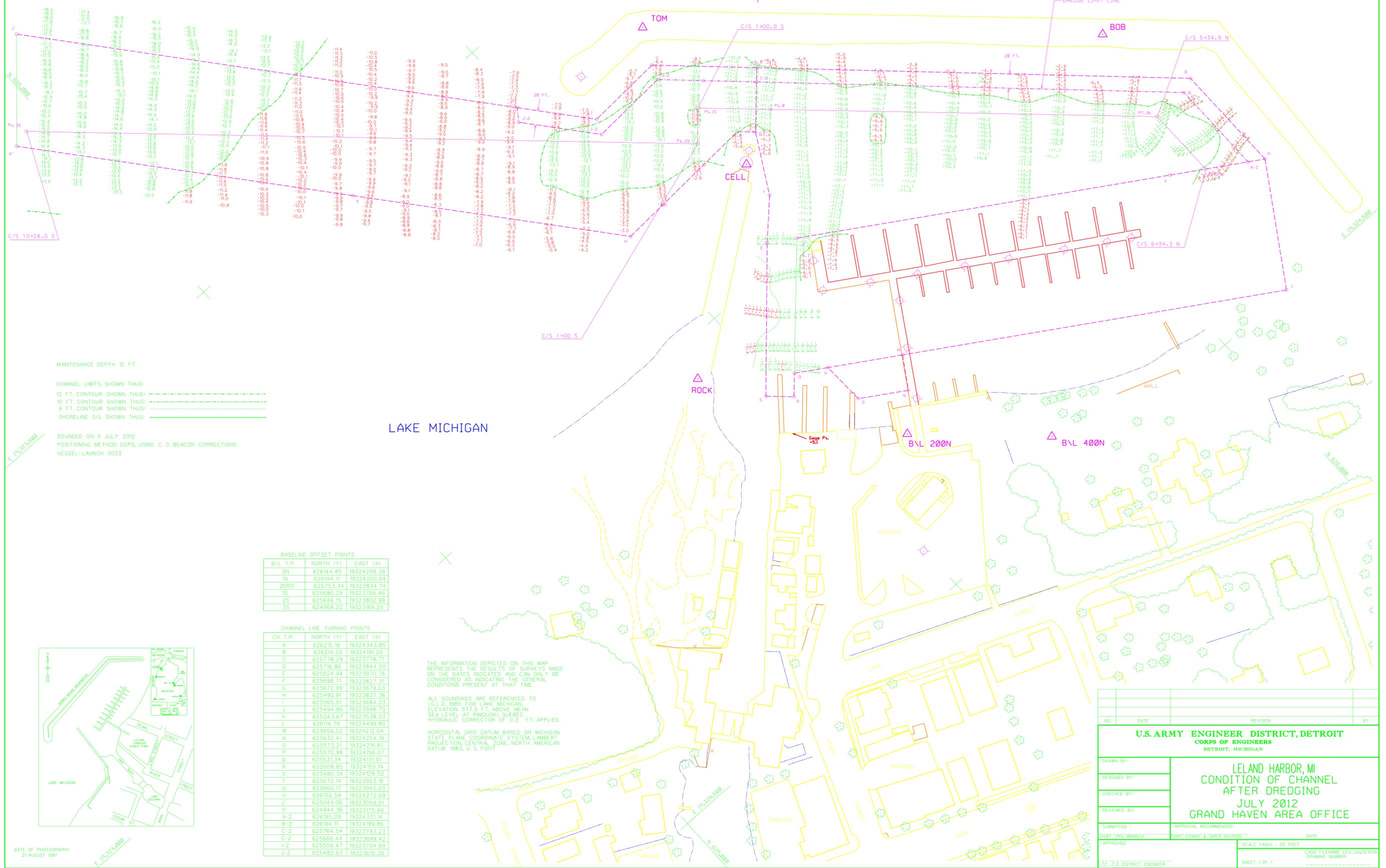


LAKE MICHIGAN

SCALE: 1" = 50'
50' 0 50'



REQUIRED DEPTH 12 FEET BELOW I.G.L.D. REQUIRED DEPTH 10 FEET BELOW I.G.L.D.
0+20 S



MAINTENANCE DEPTH 12 FT.

CHANNEL LIMITS SHOWN THUS:
12 FT. CONTOUR SHOWN THUS:
10 FT. CONTOUR SHOWN THUS:
6 FT. CONTOUR SHOWN THUS:
SHORELINE S/L SHOWN THUS:

SOUNDED ON: 5 JULY 2012
POSITIONING METHOD: DGPS, USING C. G. BEACON CORRECTIONS
VESSEL: LAUNCH 3033

BASELINE OFFSET POINTS

B/L T.P.	NORTH (Y)	EAST (X)
2N	626144.85	19324299.39
1N	626144.11	19324200.04
ZERO	625753.34	19323834.74
1S	625680.29	19323766.46
2S	625646.15	19323802.99
3S	624968.22	19323169.25

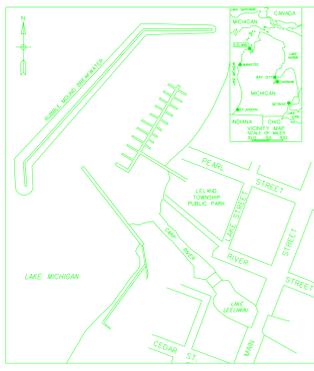
CHANNEL LINE TURNING POINTS

CH. T.P.	NORTH (Y)	EAST (X)
A	626215.18	19324343.85
B	626214.05	19324191.20
C	625778.29	19323778.71
D	625716.86	19323844.50
E	625624.94	19323970.76
F	625698.71	19323827.31
G	625672.99	19323679.03
H	625490.91	19323837.36
I	625565.51	19323684.23
J	625494.86	19323558.70
K	625243.67	19323538.03
L	626114.76	19324499.80
M	625659.52	19324212.04
N	625632.41	19324254.14
O	625573.21	19324216.61
P	625570.98	19324156.07
Q	625531.34	19324131.01
R	625508.85	19324155.14
S	625480.34	19324128.52
T	625672.14	19323923.16
U	625660.17	19323993.03
V	626102.59	19324272.69
J'	625049.06	19323059.01
K'	624944.36	19323175.66
A-2	626195.09	19324331.14
B-2	626194.11	19324199.86
C-2	625764.54	19323793.23
G-2	625655.44	19323689.42
I-2	625556.47	19323704.69
J-2	625482.63	19323615.30

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THAT TIME.

ALL SOUNDINGS ARE REFERENCED TO I.G.L.D. 1985 FOR LAKE MICHIGAN, ELEVATION 577.5 FT. ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC. HYDRAULIC CORRECTOR OF 0.2 FT. APPLIED.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, CENTRAL ZONE, NORTH AMERICAN DATUM 1983, U. S. FOOT



DATE OF PHOTOGRAPHY
21 AUGUST 1991

NO.	DATE	REVISION	BY

U.S. ARMY ENGINEER DISTRICT, DETROIT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____
REVIEWED BY: _____

LELAND HARBOR, MI
CONDITION OF CHANNEL
AFTER DREDGING
JULY 2012
GRAND HAVEN AREA OFFICE

SUBMITTED: _____ APPROVAL RECOMMENDED: _____ DATE: _____
CHIEF DISTRICT ENGINEER CHIEF CORPS & DISTRICT DIVISION

APPROVED: _____ SCALE 1 INCH = 50 FEET
SHEET 1 OF 1 CADD FILENAME: LELAND_HAVEN_12.DWG DRAWING NUMBER: _____
S.T.C., C.E., DISTRICT ENGINEER